

Claims

1. A thin electronic chip card comprising:
an IC chip in a core film;
a galvanic element as an energy store, which has at least one lithium-intercalating electrode and a thin, flexible housing comprising two metal foils, which bear directly against the electrodes and are connected to each other in a sealed manner with an adhesive or sealing layer, arranged in a recess in the core film;
an elastic stress-compensating adhesive layer which adheres to metals and plastics coated over both sides of the core film and the element; and
an overlay plastic film applied to each of the adhesive layers to firmly bond the core film and the element.
2. The thin electronic chip card according to claim 1, produced by cold lamination of the overlay films to the core film, surfaces of the metallic housing to the overlay films and the metallic housing to the core film.
3. The thin electronic chip card according to claim 1, wherein the adhesive has a glass transition temperature between about 35°C and about 70°C and an elongation at break of about 40 – about 52%.
4. The thin electronic chip card according to claim 1, wherein the adhesive is light-curable.

5. The thin electronic chip card according to claim 1, wherein the adhesive is an epoxy resin.

6. The thin electronic chip card according to claim 1, wherein the adhesive is a thermoplastic polyurethane-based material.

7. The thin electronic chip card according claim 1, wherein the overlay plastic film is PVC.

8. A thin electronic chip card comprising:
a core film having opposed sides and a recess;
an IC chip in the core film;
a galvanic element located in the recess;
an adhesive layer applied to both sides of the core film and the galvanic element; and
a plastic overlay film applied to the adhesive layers.

9. The thin electronic chip card according to claim 8, produced by cold lamination of the overlay films to the core film, surfaces of the metallic housing to the overlay films and the metallic housing to the core film.

10. The thin electronic chip card according to claim 8, wherein the adhesive has a glass transition temperature between about 35°C and about 70°C and an elongation at break of about 40 – about 52%.

11. The thin electronic chip card according to claim 8, wherein the adhesive is light-curable.

12. The thin electronic chip card according to claim 8, wherein the adhesive is an epoxy resin.

13. The thin electronic chip card according to claim 8, wherein the adhesive is a thermoplastic polyurethane-based material.

14. The thin electronic chip card according claim 8, wherein the overlay plastic film is PVC.

15. A method of producing a thin electronic chip card comprising:
forming a core film with an IC chip;
forming a recess in the core film;
placing a galvanic element in the recess;
applying an adhesive layer onto both sides of the core film and the galvanic element;
applying a plastic overlay film onto the adhesive layers; and
causing the adhesive layers to cure.

16. The thin electronic chip card according to claim 15, wherein the adhesive has a glass transition temperature between about 35°C and about 70°C and an elongation at break of about 40 – about 52%.

17. The thin electronic chip card according to claim 15, wherein the adhesive is light-curable.

18. The thin electronic chip card according to claim 15, wherein the adhesive is an epoxy resin.

19. The thin electronic chip card according to claim 15, wherein the adhesive is a thermoplastic polyurethane-based material.

20. The thin electronic chip card according claim 15, wherein the overlay plastic film is PVC.